

Pro-XL 144/18L 9 elements yagi antenna

144 to 148 MHz

Part Nr. 20309



Electrical data

Radiation at 144.3 MHz

Effective electrical length	: 1.81 λ
Isotropic gain	: 13.2 dBi
Aperture angle @ -3 dB	
- E-plane	: 2 x 20.6°
- H-plane	: 2 x 23.2°
First side lobe set	
- E-plane	: - 20 dB @ 55°
- H-plane	: - 14 dB @ 60°
Rear protection	: - 21 dB
Average stray radiation	
- E-plane	: - 30 dB
- H-plane	: - 24 dB

Bandwidth

Gain @ -1 dB	: 141 to 149 MHz
Nominal impedance	: 50 Ω
Impedance match bandwidth @ SWR <1.3/1.....	: 143 to 148 MHz
Maximum RF power (peak, SSB/CW)	: 1000 W

Array of 2 or 4 antennas

(optimized stacking distance. from center to center of elements. for minimal side lobe radiation)

- E plane - Electrical distance	: 1.49 λ
- Pratical distance	: 3.10 m
- H plane - Electrical distance	: 1.41 λ
- Pratical distance	: 2.93 m

Mechanical data

Connector	: N
Overall length	: 3.85 m
Mass	: 3.5 kg
Effective wind load	
- Horizontal polarization	: 0.12 m ²
- Vertical polarization	: 0.24 m ²
Approximate wind load (25 m/s - 55 mph)	
- Horizontal polarization	: 4.6 daN
- Vertical polarization	: 9.2 daN
Approximate wind load (45 m/s - 100 mph)	
- Horizontal polarization	: 14.8 daN
- Vertical polarization	: 29.6 daN

Radiation patterns

